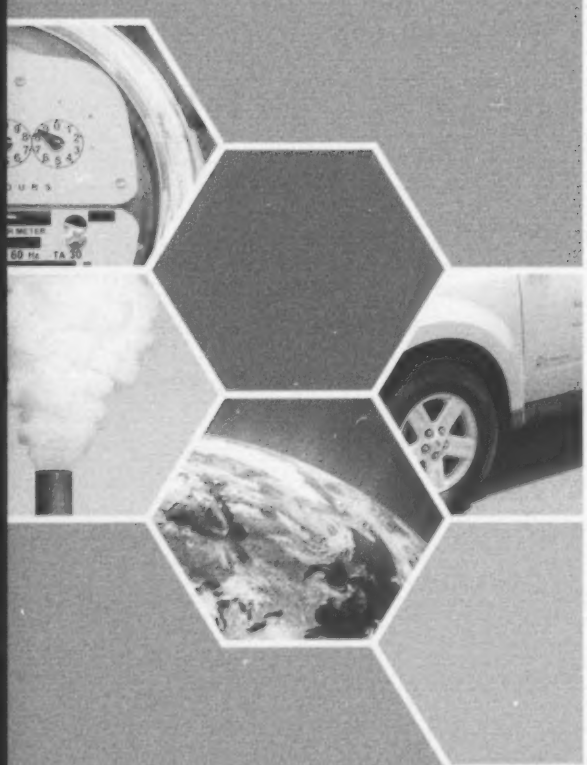


Office of Climate Change and Energy Efficiency

2014-15

Annual Report

Newfoundland Labrador

Table of Contents

Message from the Minister 2

1.0 Overview 3

Vision 3

Mandate 3

Mission 4

Lines of Business 4

2.0 Shared Commitments 6

3.0 Highlights and Accomplishments 7

4.0 Report on Performance 8

Issue 1: Risks and Opportunities Associated with Climate Change Impacts 8

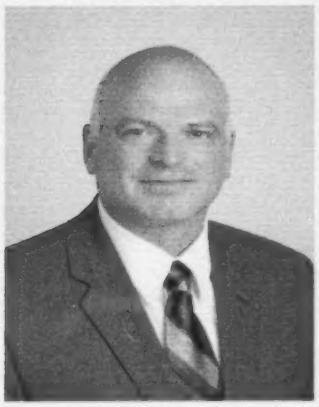
Issue 2: Transitioning to a Lower-Carbon and Energy Efficient Province 14

5.0 Opportunities and Challenges 21

Appendix A: Financial Statements 22

Appendix B: Strategic Directions 23

Message from the Minister



In accordance with the Government of Newfoundland and Labrador's commitment to accountability, I am pleased to present the 2014-15 Annual Report for the Office of Climate Change and Energy Efficiency, which is an entity located within the Office of the Executive Council.

As a category two government entity, this report addresses the Office's activities and outputs from April 1, 2014 to March 31, 2015, which encompasses the first year of the Office's 2014-2017 Business Plan. As Minister, I am accountable for the results that are reported in this document.

Climate change and energy efficiency are important, cross-cutting issues that have the potential to impact every community and economic sector in our province. The Provincial Government established the Office of Climate Change and Energy Efficiency six years ago to ensure our province is well positioned to minimize the risks associated with climate change, while maximizing potential benefits and supporting a major shift in the uptake of energy efficiency.

Significant progress has been made on these issues since the release of *Charting Our Course: Climate Change Action Plan 2011* and *Moving Forward: Energy Efficiency Action Plan 2011*.The Office continues to work horizontally across government and with a multitude of stakeholders to oversee implementation of these action plans. This report highlights the work that was carried out by the Office in the 2014-15 fiscal year, all of which supports the goals outlined in the 2011 action plans.

I look forward to the continued implementation of these action plans as the Office of Climate Change and Energy Efficiency continues work to ensure our province is resilient to the impacts of climate change and pursues opportunities to improve our energy efficiency and reduce greenhouse gas emissions.

Honourable Dan Crummell
Minister Responsible for the Office of Climate Change and Energy Efficiency

1.0 Overview

The Government of Newfoundland and Labrador has committed to taking effective action on climate change and supporting a major shift in the uptake of energy efficiency. In 2009, the Provincial Government established the Office of Climate Change and Energy Efficiency (CCEE) to lead work on these key issues. The need for an office to lead on these issues was identified because:

- **The issues are highly complex and cross-cutting.** Climate change and energy efficiency affect all sectors of the economy and all communities in the province, meaning a strong horizontal approach is required.
- **There is a need for high-level leadership.** Evidence from around the world consistently demonstrates that top-down leadership is the only way to make real progress in this area given the multifaceted and complicated nature of the issues.
- **Economic and environmental concerns must be effectively balanced.** The interrelationships between these considerations are numerous and complex and the province must position itself to benefit from the economic opportunities associated with the transition to a lower-carbon economy.
- **Climate change requires short-term action, a long-term vision and a sustained commitment.** This is one of few policy areas where governments throughout the world have targets that span not just years, but decades. This requires a sustained focus and a strategic approach.

Vision

The vision of the Office of Climate Change and Energy Efficiency is of a province that achieves economic, social and environmental success by effectively integrating progressive action on climate change and energy efficiency.

Mandate

The mandate of the Office of Climate Change and Energy Efficiency is:

- To advance sustained action on climate change and energy efficiency that effectively balances economic and environmental considerations, including deepening public awareness, understanding and engagement.
- To undertake focused research and analysis to enable the province to maximize opportunities and minimize risks from the impacts of climate change and the move towards a lower-carbon global economy.
- To work with departments to better integrate climate change and energy efficiency considerations into their current and future programs, services, legislation and regulations, and ensure effective coordination across government.

- To advance the province's interests and priorities in regional, national and international forums on climate change and energy efficiency, and engage external stakeholders to deepen and widen government's dialogue on next steps.

To fulfill its mandate, CCEE is composed of eight staff members (four female, two male and two vacant positions) and is located on the 5th Floor of West Block, Confederation Building in St. John's. For the fiscal year 2014-15, CCEE's expenditures totaled $ 1,014,773. For further details, please see Appendix A: Financial Statements.

Mission

By 2017, the Office of Climate Change and Energy Efficiency will have advanced the province's capacity to reduce greenhouse gas (GHG) emissions, adapt to the impacts of climate change and improve energy efficiency.

This mission statement identifies CCEE's priority areas over two planning cycles and represents the key longer-term results the Office will be working towards as it moves forward on the strategic direction of government (as outlined in Appendix B). A full mission statement, including measures and indicators, is contained in CCEE's 2014-17 Business Plan.

Lines of Business

The Office of Climate Change and Energy Efficiency has four lines of business:

Policy and Strategy Development - CCEE has lead responsibility within government for policy and strategy development on climate change and energy efficiency. This includes analyzing the implications of different policy approaches to achieve government's GHG reduction and energy efficiency targets and desired outcomes; understanding the impacts of climate change and economic opportunities for the province; assessing the implications of national and international developments for the province; overseeing delivery of the 75 commitments in the climate change and energy efficiency actions plans, which are owned by 13 different entities, including CCEE (which is responsible for 17 commitments); and leading efforts to engage the public.

Strengthening the Evidence Base - CCEE has lead responsibility within government for research, data and analysis on climate change and energy efficiency. For example, CCEE leads the development of provincial GHG projections; reviews the impact of different carbon prices on the provincial economy; deepens understanding of how the province may be impacted by climate change and what can be done to improve resilience; and works with economic and energy models to better understand the relationship between investments in energy efficiency, energy consumption and economic activity.

Promoting Government-Wide Action - CCEE provides specialist knowledge and expertise to strengthen departments' understanding of climate change and energy efficiency and to help them integrate these issues into their ongoing operations, programs, legislation, and regulations. CCEE aims to drive action across government and ensure that government takes a coordinated approach to the opportunities and challenges to help ensure resources are directed to where they will have the most impact.

Representing the Province in Intergovernmental Forums and Engaging External Stakeholders - CCEE represents the province's interests in regional, national and international forums on climate change and energy efficiency. The Office has an extensive network of contacts in other jurisdictions which it actively engages to advance the province's policy objectives. CCEE also engages external

stakeholders to help inform policy analysis and guide the implementation of commitments, including large industry, the electrical utilities, industry associations, academia, non-government organizations and other governments such as the Nunatsiavut Government.

2.0 Shared Commitments

CCEE is responsible for overseeing implementation of the province's 2011 climate change and energy efficiency action plans. Through these action plans, the Provincial Government has committed to enhancing the province's resilience to the impacts of climate change, reducing the province's GHG emissions, supporting a major shift in the uptake in energy efficiency and demonstrating leadership on each of these issues.

Advancing action in these areas requires establishing effective collaboration with a multitude of stakeholders, including departments and agencies across government and organizations within various economic sectors. To this end, a key part of CCEE's work is creating strong networks and partnerships to drive forward progress on these issues. As an example, throughout 2014-15 CCEE worked with entities within the Provincial Government and all other Atlantic provinces to conduct an economic analysis of the costs and benefits of options to minimize risks associated with climate change at the community level. This work is being completed through the Federal Government's Adaptation Platform and will inform future initiatives to address climate change impacts in Newfoundland and Labrador. As of March 31, 2015, this work is ongoing.

Additionally, CCEE has continued to work to integrate climate change and energy efficiency into government's planning and decision making processes by working closely with other departments and agencies. For example, throughout 2014-15 CCEE reviewed 38 applications as a member of the Interdepartmental Land Use Committee and 38 applications as part of the Environmental Assessment Process. Through participating in these processes, CCEE ensures climate projections, GHG reduction and energy efficiency are being considered in plans for community and economic development.

As discussed later in this document, 2014-15 was a significant year for demonstrating leadership on climate change and energy efficiency within government's operations through the launch of the *Greening Government Action Plan* on January 21, 2015. CCEE worked with every core government department and agency to develop this action plan and implementation of the plan will require a strong, coordinated approach to ensure success in every area of government's operations. By March 31, 2015, CCEE has already implemented several early initiatives in collaboration with other entities to achieve progress on this issue. This has included working with the Multi Materials Stewardship Board (MMSB) to complete waste audits in select government buildings, partnering with the Government Procurement Agency to continue deepening awareness of green procurement practices, and partnering with the Newfoundland and Labrador Statistics Agency to survey employees' attitudes towards green behaviours.

In addition to these examples, the information provided throughout this report demonstrates that, to achieve its mandate, CCEE has consistently worked horizontally across government and collaborated with a multitude of entities to support progress on climate change and energy efficiency in Newfoundland and Labrador.

3.0 Highlights and Accomplishments

Budget 2014 allocated $550,000 over two years to develop and implement two pilot projects aimed at supporting a shift in the uptake of energy efficiency and conservation in the province. As of March 31, 2015, both of these initiatives have been designed and launched and implementation is underway.

The first pilot project, entitled the *HotShots* initiative, was launched by CCEE and the Department of Education and Early Childhood Development on October 10, 2014 at C.C. Loughlin School in Corner Brook. The goal of the initiative is to raise awareness about energy efficiency and conservation among students and teachers, with several components being completed in partnership with the takeCHARGE program. By March 31, 2015, the initiative had been rolled out to every school in the province and, as outlined later in this document, included disseminating resource packs to every French and English public school in the province, delivering presentations that reached over 4,200 students, launching a new curriculum-based website for teachers, and offering two contests for students to promote energy efficiency and conservation. Feedback on the initiative received from teachers has been consistently positive and all targets for the pilot project are on track to be met or exceeded by the end of the 2014-15 school year.

Photo of the Honourable Susan Sullivan and the Honourable Dan Crummell during the launch of the *HotShots* initiative

The second pilot project, known as the *Home Energy Monitoring Pilot Project,* began on September 26, 2014 and is being completed in partnership with Newfoundland and Labrador Hydro. The initiative is being completed over two years through a $350,000 investment in Budget 2014. The purpose of the initiative is to determine whether real-time energy display devices promote energy conservation at home. In total, 750 individuals are participating in this project. These individuals are spread across three groups; one group will receive real-time energy monitors, one group will receive tips and advice to save energy and one group will receive both the monitor and tips and advice. This project furthers the Provincial Government's goal in the 2011 climate change and energy efficiency action plans to support a major shift in the uptake of energy efficiency in the province. The lessons from this project will be ready to inform next steps by March 31, 2016.

Together, these two pilot projects and other work highlighted throughout this document show the Provincial Government continues to demonstrate a sustained commitment for achieving progress on energy efficiency.

4.0 Report on Performance

March 31, 2015 marked the end of the first year of CCEE's three-year business plan. The plan identifies two strategic issues that guide CCEE's work over the 2014-17 period: 1) risks and opportunities associated with climate change impacts, and 2) transitioning to a low-carbon and energy-efficient province. This section reports on CCEE's performance for the 2014-15 objective for each of these issues. The results outlined in this section support progress towards achieving the strategic direction of government, as outlined in Annex B.

Issue 1: Risks and Opportunities Associated with Climate Change Impacts

Global temperatures are rising and climates around the world are changing as a result. In Newfoundland and Labrador, temperatures are already 1.5°C warmer than the historical average and they are expected to continue to increase by mid-century. In addition to rising temperatures, precipitation patterns are changing and extreme weather events are expected to become more frequent and intense. Improving the province's ability to mitigate and adapt to these changes supports the Provincial Government's strategic direction of advancing action on climate change, as outlined in Annex B.

These changes may present multiple environmental, social and economic risks. These risks may include increases in coastal erosion and flooding, which may affect community development and public safety, the survival of new invasive species, which may impact human health and various economic sectors, as well as changes in snow patterns and winter sea ice in northern areas, which may disrupt traditional transportation routes. While the risks are significant, the impacts of climate change may also generate new opportunities in Newfoundland and Labrador within the tourism, agriculture, forestry, fishing and aquaculture sectors, among others.

Responding to these risks and opportunities requires deepening the province's awareness and understanding of these issues. By building capacity in this area, Newfoundland and Labrador will be better positioned to plan for the realities of a changing climate, while minimizing potential risks and maximizing opportunities.

Goal 1: By 2017, the Office of Climate Change and Energy Efficiency will have advanced initiatives to increase awareness and capacity to manage risks and seize opportunities associated with climate change impacts.

Reporting on Objective 1.1

The following table provides an overview of initiatives undertaken by CCEE during 2014-15 to fulfill its objective of advancing work to deepen awareness and understanding within government and amongst stakeholders of the issues pertaining to the risks and opportunities associated with climate change.

The three indicators CCEE is reporting on under this objective are:

- Supported departments and agencies in the implementation of the Ciimate Change Action Plan;
- Evaluated the impact of the Turn Back the Tide campaign and identified next steps to build on the momentum of the campaign to raise awareness going forward; and
- Engaged stakeholders on the risks and opportunities associated with climate change and worked to deepen understanding of the issues through activities such as webinars, presentations and information/training sessions.

Objective 1.1	By March 31, 2015, the Office will have advanced work to deepen awareness and understanding within government and amongst stakeholders of the issues pertaining to the risks and opportunities associated with climate change.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**
Supported departments and agencies in the implementation of the Climate Change Action Plan	**Providing New Climate Tools for Infrastructure Design** In 2014-15, CCEE updated the province's Intensity-Duration-Frequency (IDF) curves. These curves are developed from historical data to predict future extreme rainfall events. They are critical tools for ensuring infrastructure designs are able to withstand increases in precipitation, including vital transportation, municipal, marine and industrial infrastructure. The technical work for this project was completed by Conestoga Rovers and Associates (CRA), who were contracted through a Request for Proposals that was issued on October 8, 2014. The total value of this contract was $38,045. Through this contractual arrangement, CRA updated a total of 13 IDF curves to ensure they are reflecting the most up-to-date weather data, building upon the six curves already updated by Environment Canada. CRA also developed precipitation projections for 19 total locations in the province. The new IDF curves and projections are available online at: www.exec.gov.nl.ca/exec/ccee/publications/idf_curve_2015.pdf This work supports commitments in the Climate Change Action Plan to strengthen long-term climate forecasting for the province and to improve access to information on local precipitation trends, including through collaboration with the Federal Government. **Launching a New Climate Information Portal** Providing access to up-to-date, high-quality climate data will help ensure businesses and communities in Newfoundland and Labrador can appropriately and confidently plan for future changes in climate. On December 3, 2014, the Provincial Government launched a new Climate Information Portal on its Community Accounts website. CCEE worked with the Newfoundland and Labrador Statistics Agency to create the information portal, which includes climate data from over 70 Environment Canada weather stations throughout Newfoundland and Labrador. By using this new interactive tool, individuals can access temperature, wind and

Objective 1.1	By March 31, 2015, the Office will have advanced work to deepen awareness and understanding within government and amongst stakeholders of the issues pertaining to the risks and opportunities associated with climate change.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**
	rainfall data from 1909 to 2013, with data available at the community, regional and provincial level. This data can be used to better understand the climate in a particular area and changes in climate over time. Such information is crucial when making important decisions about community and business development, as well as emergency management planning. The portal can be found online at: http://nl.communityaccounts.ca/climate/ This work supports a commitment in the Climate Change Action Plan improve access to information on local precipitation trends to, including through collaboration with the Federal Government. **Hosting Workshops to Assess Climate Risks in Infrastructure Design** Engineers Canada established the Public Infrastructure Engineering Vulnerability Committee (PIEVC) to oversee national efforts to assess the vulnerability of public infrastructure to climate change. PIEVC developed a protocol in 2005 to guide vulnerability assessments. This allows for the systematic gathering and examination of available data to understand the impact of changing climatic conditions on infrastructure. CCEE, in partnership with the Department of Environment and Conservation, supported the demonstration of the PIEVC protocol by hosting three workshops in St. John's on June 3-4, 2014. The purpose of these workshops was to raise awareness of climate change impacts on infrastructure and available data sets among local decision makers, engineers and planners at the provincial and municipal level. In total, these workshops were attended by approximately 120 government decisions makers, engineers, planners, municipal staff and other stakeholders. This work supports commitments in the Climate Change Action Plan to enhance the dialogue on the impacts of climate change in Newfoundland and Labrador and to include consideration of climate change implications in the design of buildings and infrastructure.
Evaluated the impact of the *Turn Back the Tide* campaign and identified next steps to build on the	**Evaluating the *Turn Back the Tide* Campaign** The *Turn Back the Tide* campaign provides information to Newfoundlanders and Labradorians on climate change and energy efficiency, including information on the risks and opportunities associated with climate change in this province. The campaign was evaluated throughout 2014-15, with the final evaluation report released on March 26, 2015. The evaluation was completed internally by CCEE. The following is a summary of the evaluation's key findings:

Objective 1.1	By March 31, 2015, the Office will have advanced work to deepen awareness and understanding within government and amongst stakeholders of the issues pertaining to the risks and opportunities associated with climate change.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**
momentum of the campaign to raise awareness going forward	Relevance • The campaign helped achieve CCEE's goals, specifically the commitment in the 2011 climate change and energy efficiency action plans to launch a public awareness campaign. • The campaign filled an identified public need, as public consultations held on climate change and energy efficiency in 2010 indicated the need for government to take a leadership role in increasing awareness and understanding of these issues. • The campaign did not duplicate existing initiatives and sought to complement initiatives where possible, such as initiatives undertaken by the takeCHARGE program on energy efficiency and the Multi Materials Stewardship Board on waste diversion. Design and Delivery • The design of the campaign was based upon thorough research during the development of assets, as well as during deployment and evaluation planning. • The campaign effectively utilized financial resources, levered funding from other departments and entities and benefited from synergies with other work that was being done by CCEE that could be promoted through the *Turn Back the Tide* campaign. • The campaign achieved reach by completing province-wide advertising, maintaining a social media presence, establishing community partnerships and participating in promotional events. • The campaign achieved all targets established for delivery by achieving over 56,000 website visits by March 31, 2014 (target: 50,000), over 1,700 Facebook Page Likes (target: 1,000) and over 7,000 video views (target: 1,000) Success *Immediate Outcomes* • The campaign was able to improve the availability of tools and resources through the launch of the *Turn Back the Tide* website, which contains over 170 total pages of content, three interactive tools that provide tips on taking action, and three publications developed by CCEE, as well as a number of publications by other organizations. • Follow-up survey results indicate some progress towards increasing understanding of climate change and energy efficiency and awareness of actions that can be taken. *Intermediate Outcomes*

Objective 1.1	By March 31, 2015, the Office will have advanced work to deepen awareness and understanding within government and amongst stakeholders of the issues pertaining to the risks and opportunities associated with climate change.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**
	• Follow-up survey results indicate slight progress towards establishing behavioural change. • The *Turn Back the Tide* campaign demonstrated provincial government leadership by receiving two Pinnacle Awards in 2014 from the Newfoundland and Labrador chapter of the International Association of Business Communicators, which were an award for Government Communication Program and an award for Digital Communication Channels. A full copy of the evaluation can be found online at: www.exec.gov.nl.ca/exec/ccee/publications/turn-back-the-tide_evaluation.pdf Based upon the findings of this evaluation, notably the overall success of the campaign's award-winning digital assets, CCEE will update the campaign's digital assets to ensure they remain relevant and continue to allocate resources to maintain them. This will support further efforts to raise awareness about the risks and opportunities associated with climate change in Newfoundland and Labrador.
Engaged stakeholders on the risks and opportunities associated with climate change and worked to deepen understanding of the issues through activities such as webinars, presentations and information/training sessions.	**Launching the Bonne Bay Marine Station Climate Change Exhibit** On May 15, 2014, CCEE launched a new climate change exhibit at the Bonne Bay Marine Station in Norris Point, entitled "Newfoundland and Labrador: A Sea of Change." The exhibit was completed with in-kind support and funding from CCEE, Memorial University and the Department of Fisheries and Aquaculture. The exhibit uses a custom-built, downloadable application to show how climate change is impacting the marine environment, with information and examples that are specific to Newfoundland and Labrador. Through the launch of this exhibit, visitors to the marine station, including students, are able to understand the significant impacts that climate change is having on the ocean and the considerable risks this presents to marine ecosystems and communities in the province. An online version of the digital component of the app can be found at: www.bonnebay.ca/webapp **Continuing the Adaptation Network** CCEE established a provincial adaptation network in 2013 to promote collaboration and share best practices on issues relating to climate change adaptation in Newfoundland and Labrador. This network includes representatives from eight government departments and agencies, as well as Memorial University, Municipalities Newfoundland and Labrador, and the Newfoundland and Labrador Environmental Industry Association. The network met on April 4, 2015 and November 27, 2014. During these meetings, presentations were delivered to raise awareness about how the province is

Objective 1.1	By March 31, 2015, the Office will have advanced work to deepen awareness and understanding within government and amongst stakeholders of the issues pertaining to the risks and opportunities associated with climate change.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**

addressing climate risks through flood risk mapping and emergency management planning, and discussions were initiated on priority areas moving forward.

Engaging with Stakeholders Groups

Delivering presentations to raise awareness about the impacts of climate change in Newfoundland and Labrador and options for minimizing risks and maximizing opportunities is a key part of CCEE's day-to-day business.

Communities throughout Newfoundland and Labrador are experiencing first-hand the impacts of climate change and are on the frontlines of minimizing the associated risks. Throughout 2014-15, CCEE delivered presentations to community leaders during training sessions hosted by Municipalities Newfoundland and Labrador. CCEE's presentations highlighted the important role municipalities play in tackling climate change and provided tips and advice on minimizing risks within our communities. As of March 31, 2015, these presentations were completed in:

- Stephenville (February 21, 2015)
- Port au Choix (February 28, 2015)
- St. John's (March 14, 2015)
- Gander (March 28, 2015)

Climate change will have an impact on every sector of the economy. As such, CCEE has delivered presentations on this topic to a number of other stakeholders, including presentations to:

- Memorial University's Faculty of Business (May 24, 2014)
- Office of the Chief Information Officer (June 5, 2014)
- The Museum Association of Newfoundland and Labrador (October 18, 2014)
- The Landscape Association of Newfoundland and Labrador (November 4, 2014)
- The Geological Association of Canada (February 16, 2015)

Engaging Aboriginal Groups

In May 2014, CCEE disseminated information on key products and services that are available to assist northern Labrador communities in planning for climate change to the Innu Nation and the Nunatsiavut Government. These tools were the provincial climate change projections and the province's Flood Alert System, each of which includes information for six locations in Labrador, as well a study of sea level change and coastal erosion in the province, which includes two regional assessments for Labrador.

Objective and Indicators for 2015-16

The following table provides CCEE's objective and indicators for the 2015-16 fiscal year.

Objective 1.2	By March 31, 2016, the Office will have collaborated with internal and external stakeholders on initiatives for managing risks and advancing opportunities across the province and within sectors.
Measure: Collaborated with internal and external stakeholders on initiatives aimed at managing risks and maximizing opportunities.	

Indicators:

- Continued implementation of the climate change, energy efficiency and greening government action plans, including by providing support to departments and agencies.
- Engaged stakeholders in initiatives to improve understanding of the risks and opportunities associated with climate change.

Issue 2: Transitioning to a Lower-Carbon and Energy Efficient Province

The Government of Newfoundland and Labrador recognizes that climate change is a shared challenge and every jurisdiction must be a part of the solution. Transitioning to a lower-carbon economy is critical if Newfoundland and Labrador is to be successful in taking action on this issue. While improving our energy efficiency is a key approach for reducing GHG emissions, energy efficiency can produce additional benefits, including reduced utility bills for homeowners and lower operating costs and improved competitiveness for businesses. Improving the province's ability to minimize risks and maximize opportunities associated with a transition to a lower-carbon and more energy efficient province supports the Provincial Government's strategic direction of advancing action on climate change, as outlined in Annex B.

In the 2011 climate change and energy efficiency action plans, the Provincial Government reiterated its commitment to achieve targets for reducing GHG emissions and energy consumption. These commitments, which were initially made through the Conference of New England Governors and Eastern Canadian Premiers (NEG-ECP), include reducing energy consumption by 20 per cent by 2020, compared to business-as-usual projections, and reducing GHG emissions to 10 per cent below 1990 levels by 2020.

However, provincial GHG emissions are projected to grow over the next decade and further policies and measures will be needed to advance progress towards meeting Newfoundland and Labrador's 2020 targets for reducing GHG emissions and energy consumption. Meeting these targets is a long-term challenge and transitioning to a lower-carbon economy will require sustained focus, including efforts to broaden understanding on these issues.

Goal 2:	By 2017, the Office of Climate Change and Energy Efficiency will have advanced initiatives to increase understanding and capacity to transition to a lower-carbon and energy efficient province.

Reporting on Objective 2.1

The table on the following page provides an overview of initiatives undertaken by CCEE during 2014-15 to fulfill its objective of advancing work to deepen the awareness and understanding within government and amongst stakeholders of the issues pertaining to the transition to a lower-carbon and energy efficient province.

The three indicators for which CCEE are reporting on under this objective are:

- Supported departments and agencies in the implementation of the Climate Change and Energy Efficiency Action Plans;
- Evaluated the impact of the *Turn Back the Tide* campaign and identified next steps to build on the momentum of the campaign to raise awareness going forward; and
- Engaged stakeholders on work related to emissions reduction and the benefits of energy efficiency and worked to deepen understanding of the issues through activities such as webinars, presentations and information/training.

Objective 2.1	By March 31, 2015, the Office will have advanced work to deepen the awareness and understanding within government and amongst stakeholders of the issues pertaining to the transition to a lower-carbon and energy efficient province.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**
Supported departments and agencies in the implementation of the Climate Change and Energy Efficiency Action Plans	**Developing and Implementing the *HotShots* Initiative** Budget 2014 announced $200,000 over two years to implement a pilot project aimed at raising awareness of energy efficiency and conservation among students and teachers. The project, which is known as the *HotShots* initiative, was developed and implemented as a partnership between CCEE and the Department of Education and Early Childhood Development, with select components completed in collaboration with the takeCHARGE program. The purpose of the initiative was to raise awareness among students and teachers of the importance of energy efficiency and conservation, which was a commitment in the 2011 climate change and energy efficiency action plans. *HotShots* was launched on October 10, 2014. The four components of the pilot project included: • Distributing information packs about energy efficiency and conservation to every school in the province, including schools with the Conseil Scolaire

Objective 2.1	By March 31, 2015, the Office will have advanced work to deepen the awareness and understanding within government and amongst stakeholders of the issues pertaining to the transition to a lower-carbon and energy efficient province.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**

Francophone;

- Delivering presentations to grades K-6 students, in partnership with the takeCHARGE program;
- Implementing two contests in partnership with the takeCHARGE program (one for grades K-6 and one for grades 7-12); and
- Launching a new, curriculum-based website for teachers.

As of March 31, 2015, development of each of the project components had concluded and implementation was well underway. Specifically, the website was launched in October 2014, information packs were distributed to every public school in November 2014, the winners of the contest for grades K-6 were announced on March 19, 2015 and, as of March 31, 2015, 149 presentations were delivered in 42 schools, reaching over 4,200 students. More information on the initiative can be found at: www.hotshotnl.ca

Examining the Case for Adopting the National Energy Code for Buildings

In the 2011 climate change and energy efficiency action plans, the Provincial Government committed to examine the case for adopting the National Energy Code for Buildings (NECB) in Newfoundland and Labrador. To deliver against the commitment, a technical analysis was needed to assess the costs and benefits of meeting the code's requirements. To this end, a Request for Proposals was issued on October 28, 2014 and a contract was subsequently entered into with Caneta Resources valued at $83,347. As part of this contractual arrangement, Caneta used an archetype approach to compare current construction practices for five building types to the NECB 2011 and ASHRAE 90.1 (2010). The report examined the incremental construction costs and energy performance of meeting each standard, in comparison to current construction practices. These findings will be used to complete targeted consultations with key stakeholder groups moving forward. Consultations were held from late July through September, 2015. A full copy of the report can be found online at:
www.exec.gov.nl.ca/exec/ccee/publications/necb_archetype_analysis.pdf

Releasing the Greening Government Action Plan

On January 21, 2015, CCEE launched the *Greening Government Action Plan* with the goal of creating a culture of environmental sustainability within the Government of Newfoundland and Labrador, while building upon successes to date. CCEE led the development of the action plan, in consultation with all core departments and agencies across government. In total, the plan contains 46 commitments across five strategic objectives. These objectives are designed to advance government's efforts to reduce GHG emissions and improve energy

Objective 2.1	By March 31, 2015, the Office will have advanced work to deepen the awareness and understanding within government and amongst stakeholders of the issues pertaining to the transition to a lower-carbon and energy efficient province.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**

efficiency. They are:

- Increasing waste diversion;
- Improving the sustainability of government buildings;
- Integrating green considerations into transportation decisions;
- Increasing the procurement of environmentally preferable products and services; and
- Effectively engaging employees on each of these issues.

This action plan will be implemented over a five-year period, from 2015 to 2019. The launch of this plan fulfilled a specific commitment in the 2011 climate change and energy efficiency action plans.

Completing Waste Audits in Government Buildings

In March 2014, CCEE worked with the MMSB to conduct waste audits of a broadly representative sample of government buildings. The purpose of this work was to understand the volume and composition of waste being generated in government buildings. The audits were conducted on six government buildings from March to December 2014. The six buildings were:

- West Block, Confederation Building in St. John's
- Petten Building in St. John's
- Advanced Education and Skills Regional Office in Grand Falls – Windsor
- Service Newfoundland and Labrador Building in Harbour Grace
- Arts and Culture Centre in Corner Brook
- College of the North Atlantic Campus in Labrador West

An audit was completed in each building to understand the volume and composition of waste being generated. This information will be used to support waste diversion initiatives within government going forward. This report outlining the findings of this work was released on March 31, 2015 and can be found online at: www.exec.gov.nl.ca/exec/ccee/publications/waste-audit-report.pdf

This information on waste generation supported the development and implementation of the *Greening Government Action Plan*, which is a key commitment in the 2011 climate change and energy efficiency action plans.

Promoting Green Procurement

CCEE and the Government Purchasing Agency collaborated to develop and deliver a green procurement workshop in St. John's on March 25, 2015. This workshop was structured to build upon the release of the *Buying Green!* guide in the previous year by discussing the successes, challenges and benefits of green procurement and providing practical advice on greening procurement decisions.

Objective 2.1	By March 31, 2015, the Office will have advanced work to deepen the awareness and understanding within government and amongst stakeholders of the issues pertaining to the transition to a lower-carbon and energy efficient province.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**
	The workshop was attended by over 40 government officials and will be used to inform future training in this area. **Consulting with Large Industrial Companies on Approaches to Reduce GHG Emissions** Bilateral consultations were held with each large industrial company in the province from February 27 to March 27, 2015. The consultations were led by CCEE and included representatives from the departments of Natural Resources and Environment and Conservation and Labrador and Aboriginal Affairs Office. The consultations included an overview of provincial policy commitments, existing and potential actions in other jurisdictions to regulate GHG emissions, and key policy challenges to be addressed. Feedback received showed industrial companies sought long-term policy certainty to inform long-term investment planning, were keen to ensure their competitive position was maintained, promoted the use of technology, market transformation measures or adjustment funds to facilitate long-term reductions in GHG emissions, and desired flexibility to accommodate local and company-specific circumstances.
Evaluated the impact of the Turn Back the Tide campaign and identified next steps to build on the momentum of the campaign to raise awareness going forward	**Evaluating the *Turn Back the Tide* Campaign** The *Turn Back the Tide* campaign provides information for Newfoundlanders and Labradorians on climate change and energy efficiency, including information to support improvements in energy efficiency. The campaign was evaluated internally by CCEE throughout 2014-15, with the final report released on March 26, 2015. For a summary of the evaluation's key findings, see the results reported for the second indicator under Objective 1.1. A full copy of the evaluation can be found online at: www.exec.gov.nl.ca/exec/ccee/publications/turn-back-the-tide_evaluation.pdf Based upon the findings of this evaluation, notably the overall success of the campaign's award-winning digital assets, CCEE will update the campaign's digital assets to ensure they remain relevant and continue to allocate resources to maintain them. This will support further efforts to raise awareness about actions to support a transition to a low-carbon and energy-efficient province, including actions that can be taken by homeowners, businesses and communities in Newfoundland and Labrador.
	Gauging Employees' Opinions on Green Behaviours The Greening Government Survey was conducted by CCEE in fall 2014 to inform the direction of the *Greening Government Action Plan* and to establish a baseline for measuring success on efforts to boost employee engagement on this issue. The survey was developed by CCEE and administered by the Newfoundland and Labrador Statistics Agency to all core government employees via email and mail,

Objective 2.1	By March 31, 2015, the Office will have advanced work to deepen the awareness and understanding within government and amongst stakeholders of the issues pertaining to the transition to a lower-carbon and energy efficient province.

Measure: Advanced work towards deepening awareness and understanding.

Indicators (2014-15):	Results:
Engaged stakeholders on work related to emissions reduction and the benefits of energy efficiency and worked to deepen understanding of the issues through activities such as webinars, presentations and information/training sessions.	when employees did not have an email address. Data collection occurred from October 27 to December 8, 2014. The survey provided the following key findings: • Nearly all respondents value green activities and behaviours, as well as employers that support such initiatives. However, only half feel these behaviours are encouraged by Provincial Government and valued at their work site. • There are varying levels of awareness of government's green initiatives and uncertainty of which green activities are occurring at their work site. • A variety of green activities or services are available at most work sites. When available, most respondents participate. • Respondents indicated that access to tools and resources to support green activities would encourage them to participate at their worksite. • For future government efforts, respondents indicated two areas on which to focus efforts were increasing the availability of green activities and incorporating green requirements into new and existing practices and policies. **Establishing the Greening Government Network** In addition to the 46 government-wide commitments outlined in the Greening Government Action Plan, CCEE established a Greening Government Network and initiated a process whereby each core department and agency will develop a list of eight to 10 action items to green their own operations. This network was first convened on January 29, 2015. Moving forward, the network will play a key role in overseeing implementation of efforts to green government's operations within departments and agencies, including by supporting employee engagement initiatives over the coming years. **Engaging with Stakeholder Groups** Throughout 2014-15, CCEE delivered presentations to community leaders during training sessions hosted by Municipalities Newfoundland and Labrador. In addition to focusing on how municipalities can minimize the risks associated with climate change, CCEE's presentations also highlighted how municipalities can lead by example and reduce GHG emissions and improve energy efficiency within their operations. As of March 31, 2015, these presentations were completed in: • Stephenville on February 21, 2015; • Port au Choix on February 28, 2015; • St. John's on March 14, 2015; and • Gander on March 28, 2015.

Objective 2.1	By March 31, 2015, the Office will have advanced work to deepen the awareness and understanding within government and amongst stakeholders of the issues pertaining to the transition to a lower-carbon and energy efficient province.
Measure: Advanced work towards deepening awareness and understanding.	
Indicators (2014-15):	**Results:**

Participating in Home Show 2015

During Home Show 2015, which was held on March 21 and 22 in St. John's, CCEE partnered with the Canadian Home Builders Association Newfoundland and Labrador and Newfoundland Power to host a "Kid Zone" as part of the event's Energy Efficiency Pavilion. The pavilion provided resources to help individuals learn about ways to improve the energy efficiency of their home. Through the Kid Zone, CCEE and Newfoundland Power provided resources and offered activities to teach youth about the importance of saving energy. This work built upon the *HotShots* initiative outlined previously.

Establishing the Climate Change and Energy Efficiency Newsletter

In 2015, CCEE created a newsletter to provide updates to government departments and agencies on issues relating to climate change and energy efficiency. The first edition of the newsletter was circulated on January 23, 2015 and included information on Greening Government, the *HotShots* initiative, green procurement training sessions, the new climate information portal, and the international climate change negotiations that took place in 2014. This newsletter will be circulated on a regular basis to ensure government departments and agencies are kept apprised of developments on climate change and energy efficiency.

Objective and Indicators for 2015-16

The following table provides CCEE's objective and indicators for the 2015-16 fiscal year.

Objective 2.2	By March 31, 2016, the Office will have collaborated with internal and external stakeholders on initiatives for transitioning to a lower-carbon and more energy-efficient economy.
Measure: Collaborated with internal and external stakeholders on initiatives aimed at transitioning to a lower-carbon and more energy-efficient economy.	

Indicators:

- Continued implementation of the climate change, energy efficiency and greening government action plans, including by providing support to departments and agencies.
- Engaged stakeholders in initiatives aimed at minimizing risk and maximizing opportunities associated with the transition to a lower-carbon and energy-efficient economy.

5.0 Opportunities and Challenges

The evidence is clear and there is no longer any debate that climate change is happening. The impacts of climate change will be diverse and may pose significant risks to communities throughout the world. The Intergovernmental Panel on Climate Change has indicated global action is required to make progress on this issue. In 2009, the 194 countries and one regional economic body that are party to the United Nations Framework Convention on Climate Change (UNFCCC) agreed they would adopt a new legal agreement to tackle climate change at the international conference in Paris in December 2015. In preparation for this, climate change is featuring prominently on the agenda of numerous high-level meetings and conferences occurring at regional, national and international levels throughout the world.

Achieving improvements in energy efficiency will continue to be a priority for the Government of Newfoundland and Labrador as it maintains its commitment to reduce local GHG emissions. In addition to environmental benefits, improvements in energy efficiency can generate wider benefits, including reduced monthly bills for homeowners and lower operating costs for businesses. The demand for energy-efficient and environmentally sustainable products and services is increasing, which is fostering innovation and presenting new opportunities for Newfoundland and Labrador to seize in the global green economy. These include opportunities in the development of renewable energy, examples of which include Newfoundland and Labrador's 824 MW Muskrat Falls hydroelectric project and the work being done to decarbonize electricity generation in Ramea.

At the same time, a significant challenge remains as action on climate change and energy efficiency must effectively balance environmental, social and economic considerations. However, the International Energy Agency has reported that economic growth is decoupling from GHG emissions. This appears to hold true in Newfoundland and Labrador. For example, between 1990 and 2010, real GDP in the province grew by 67%, and despite this, the province came within 0.5% of achieving its 2010 target of reducing GHG emissions back to 1990 levels. Building on this, the province's GHG target for 2020 is to reduce GHG emissions by 10% below 1990 levels, and to further reduce emissions to between 75 and 85 per cent below 2011 levels by 2050.

Throughout the next two years, CCEE will continue to drive forward action on these issues by collaborating with internal and external stakeholders in the implementation of the current climate change and energy efficiency action plans. CCEE will also work towards establishing a new framework for the province on these issues that will effectively address these challenges and opportunities.

Appendix A: Financial Statements

Expenditure and revenue figures included in this document are un-audited and based on public information provided in the Report on the Program Expenditures and Revenues of the Consolidated Revenue Fund for the year ending March 31, 2015. Audited financial statements are a requirement at the government level and are made public through the Public Accounts process. CCEE is not required to submit a separate audited financial statement.

Item	2014-15 Budget	2014-15 Revised	2014-15 Actual
Salaries	750,700	638,000	636,153
Employee Benefits	2,400	2,500	2,463
Transportation and Communications	33,000	34,500	32,177
Supplies	5,500	5,900	6,225
Professional Services	360,000	345,700	329,969
Purchased Services	13,000	7,000	6,451
Property, Furnishings and Equipment	1,000	2,000	1,335
Total	**1,165,600**	**1,035,600**	**1,014,773**

Appendix B: Strategic Directions

Strategic directions are the articulation of desired physical, social or economic outcomes that normally require action by more than one government entity. These directions are generally communicated by government through platform documents, Throne and Budget Speeches, policy documents and other communiqués. The Transparency and Accountability Act requires departments and public bodies to take into account these strategic directions in the preparation of their performance-based plans. This action will facilitate the integration of planning practices across government and will ensure that all entities are moving forward on key commitments.

The direction related to the Office of Climate Change and Energy Efficiency is provided below.

Title: **Climate Change and Energy Efficiency**

Outcome: A province that has advanced its capacity to reduce greenhouse gas emissions, adapt to the impacts of climate change and improve energy efficiency.

Components of Strategic Direction	This Direction is Addressed in entity's		
	Business Plan	**Operational Plan**	**Work Plan**
Adaptation to Climate Change Impacts	X		
Improve Energy Efficiency	X		
Reduction of Provincial GHG Emissions	X		
Government Leadership	X		
Public Awareness	X		

Office of Climate Change and Energy Efficiency
Executive Council
Government of Newfoundland and Labrador
P.O. Box 8700
St. John's, NL A1B 4J6
Telephone: (709) 729-1210
Fax: (709) 729-1119
climatechange@gov.nl.ca
www.gov.nl.ca/exec/ccee

Newfoundland
Labrador